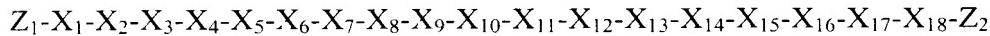


## CLAIMS

1-75 (Cancelled)

76. (New) An ApoA-I agonist compound comprising:

(i) an 18 to 22-residue peptide or peptide analogue which forms an amphipathic  $\alpha$ -helix in the presence of lipids and which comprises formula (I):



or a pharmaceutically acceptable salt thereof, wherein

$X_1$  is Pro (P), Ala (A), Gly (G), Asn (N), Gln (Q) or D-pro (p);

$X_2$  is an aliphatic residue;

$X_3$  is Leu (L);

$X_4$  is an acidic residue;

$X_5$  is Leu (L) or Phe (F);

$X_6$  is Leu (L) or Phe (F);

$X_7$  is a basic residue;

$X_8$  is an acidic residue;

$X_9$  is Leu (L) or Trp (W);

$X_{10}$  is Leu (L) or Trp (W);

$X_{11}$  is an acidic residue or Asn (N);

$X_{12}$  is an acidic residue;

$X_{13}$  is Leu (L), Trp (W) or Phe (F);

$X_{14}$  is a basic residue or Leu (L);

$X_{15}$  is Gln (Q) or Asn (N);

$X_{16}$  is a basic residue;

$X_{17}$  is Leu (L);

$X_{18}$  is a basic residue;

wherein at least one residue of the peptide or peptide analogue is a D-enantiomeric residue;

$Z_1$  is  $H_2N-$ , or  $RC(O)NR-$ ;

$Z_2$  is  $-C(O)NRR$ ,  $-C(O)OR$  or  $-C(O)OH$ ;

each R is independently -H, ( $C_1-C_6$ ) alkyl, ( $C_1-C_6$ ) alkenyl, ( $C_1-C_6$ ) alkynyl, ( $C_5-C_{20}$ ) aryl, ( $C_6-C_{20}$ ) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a

1 to 4-residue peptide or peptide analogue in which one or more bonds between residues 1 through 4 are independently a substituted amide, an isostere of an amide or an amide mimetic;

each “ - ” between residues X<sub>1</sub> through X<sub>18</sub> independently designates an amide linkage, a substituted amide linkage, an isostere of an amide or an amide mimetic;

(ii) a 14 to 21-residue deleted peptide or peptide analogue according to formula (I) in which at least one and up to eight of residues X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub>, X<sub>5</sub>, X<sub>6</sub>, X<sub>7</sub>, X<sub>8</sub>, X<sub>9</sub>, X<sub>10</sub>, X<sub>11</sub>, X<sub>12</sub>, X<sub>13</sub>, X<sub>14</sub>, X<sub>15</sub>, X<sub>16</sub>, X<sub>17</sub> and X<sub>18</sub> are optionally deleted and wherein at least one residue of the deleted peptide or peptide analogue is a D-enantiomeric residue; or

(iii) an 18 to 22-residue altered peptide or peptide analogue according to formula (I) in which at least one of residues X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub>, X<sub>5</sub>, X<sub>6</sub>, X<sub>7</sub>, X<sub>8</sub>, X<sub>9</sub>, X<sub>10</sub>, X<sub>11</sub>, X<sub>12</sub>, X<sub>13</sub>, X<sub>14</sub>, X<sub>15</sub>, X<sub>16</sub>, X<sub>17</sub> and X<sub>18</sub> is conservatively substituted and wherein at least one residue of the altered peptide or peptide analogue is a D-enantiomeric residue; or

an N-terminally blocked form, a C-terminally blocked form or an N- and C-terminally blocked form of formula (I).

77. (New) The ApoA-I agonist compound of Claim 76 wherein an L-enantiomeric residue of formula (I) is replaced with an identical D-enantiomeric residue.

78. (New) The ApoA-I agonist compound of Claim 76 which is the altered peptide or peptide analogue according to formula (I).

79. (New) The ApoA-I agonist compound of Claim 76 which is the deleted peptide or peptide analogue according to formula (I).

80. (New) The ApoA-I agonist compound of Claim 79 in which one or two helical turns of the peptide or peptide analogue is optionally deleted.

81. (New) The ApoA-I agonist compound of Claim 76 which is an 18-residue peptide or peptide analogue according to formula (I).

82. (Reinstated Claim 63) The ApoA-I agonist compound of Claim 81 in which the “-” between residues designates -C(O)NH-; Z<sub>1</sub> is H<sub>2</sub>N-; and

$Z_2$  is  $-C(O)OH$  or a salt thereof.

83. (New) The ApoA-I agonist compound of Claim 82 in which;

$X_1$  is Ala (A), Gly (G), Asn (N) or Pro (P);

$X_2$  is Ala (A), Val (V) or Leu (L);

$X_3$  is Leu (L);

$X_4$  is Asp (D) or Glu (E);

$X_5$  is Leu (L) or Phe (F);

$X_6$  is Leu (L) or Phe (F);

$X_7$  is Arg (R), Lys (K) or Orn;

$X_8$  is Asp (D) or Glu (E);

$X_9$  is Leu (L) or Trp (W);

$X_{10}$  is Leu (L) or Trp (W);

$X_{11}$  is Glu (E) or Asn (N);

$X_{12}$  is Glu (E);

$X_{13}$  is Leu (L), Trp (W) or Phe (F);

$X_{14}$  is Arg (R), Lys (K) or Orn;

$X_{15}$  is Gln (Q) or Asn (N);

$X_{16}$  is Arg (R), Lys (K) or Orn;

$X_{17}$  is Leu (L); and

$X_{18}$  is Arg (R), Lys (K) or Orn.

84. (New) A multimeric ApoA-I agonist compound which comprises formula (II):



or a pharmaceutically acceptable salt thereof, wherein:

each  $m$  is independently an integer from 0 to 1;

$n$  is an integer from 0 to 10;

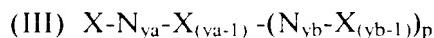
each "HH" is independently a peptide or peptide analogue according to Claim 1, the deleted peptide or peptide analogue according to Claim 1 or the altered peptide or peptide analogue according to Claim 1;

each "LL" is independently a bifunctional linker; and

each " - " independently designates a covalent linkage; or

an N-terminally blocked form, a C-terminally blocked form or an N- and C-terminally blocked form of formula (II).

85. (New) A multimeric ApoA-I agonist compound which comprises formula (III):



or a pharmaceutically acceptable salt thereof, wherein:

each X is independently  $\text{HHLL}_m - \text{HH}_n\text{LL}_m - \text{HH}$ ;

each HH is independently a peptide or peptide analogue according to Claim 1, the deleted peptide or peptide analogue according to Claim 1 or the altered peptide or peptide analogue according to Claim 1;

each LL is independently a bifunctional linker;

each  $m$  is independently an integer from 0 to 1;

each  $n$  is independently an integer from 0 to 8;

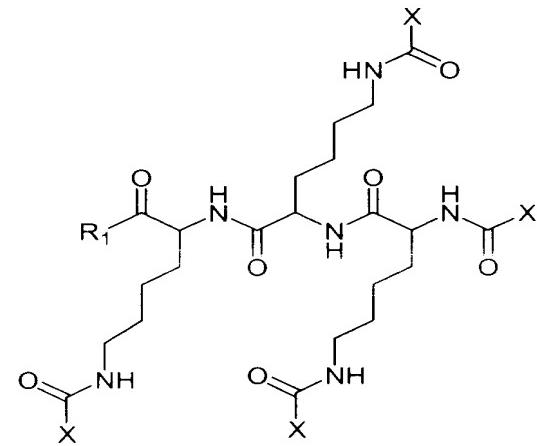
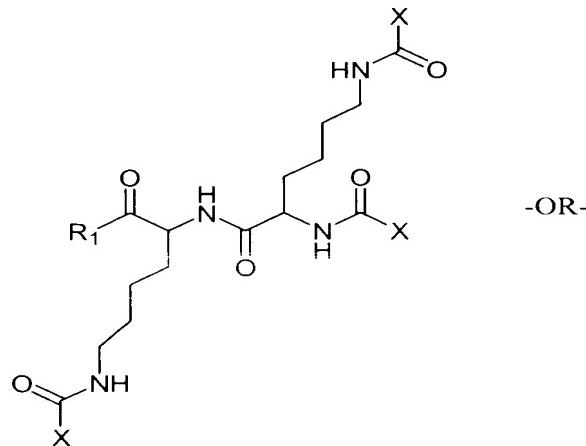
$N_{ya}$  and  $N_{yb}$  are each independently a multifunctional linking moiety where  $y_a$  and  $y_b$  represent the number of functional groups on  $N_{ya}$  and  $N_{yb}$ , respectively; each  $y_a$  or  $y_b$  is independently an integer from 3 to 8;

$p$  is an integer from 0 to 7; and

each “—” independently designates a covalent bond; or

an N-terminally blocked form, a C-terminally blocked form or an N- and C-terminally blocked form of formula (III).

86. (New) A multimeric ApoA-I agonist compound which comprises formula (IV) or (V):



(IV)

(V)

or a pharmaceutically acceptable salt thereof, wherein:

each X is independently  $\text{HHLL}_m$   $\text{HH}_n\text{LL}_m$   $\text{HH}$ ;

each HH is independently a peptide or peptide analogue according to Claim 1, the deleted peptide or peptide analogue according Claim 1 or the altered peptide or peptide analogue according to Claim 1;

each LL is independently a bifunctional linker;

each n is independently an integer from 0 to 1;

each m is independently an integer from 0 to 8;

R<sub>1</sub> is -OR or -NRR; and

each R is independently -H, (C<sub>1</sub>-C<sub>6</sub>) alkyl, (C<sub>1</sub>-C<sub>6</sub>) alkenyl, (C<sub>1</sub>-C<sub>6</sub>) alkynyl, (C<sub>5</sub>-C<sub>20</sub>) aryl, (C<sub>6</sub>-C<sub>26</sub>) alkaryl, 5-20 membered heteroaryl or 6-26 membered alk heteroaryl; or

an N-terminally blocked form or a C-terminally blocked form of formula (IV) or (V).

87. (Reinstated-formerly Claim 65) The multimeric ApoA-I agonist compound of Claim 84, 85 or 86 in which the bifunctional linker is cleavable.
88. (Reinstated-formerly Claim 66) The multimeric ApoA-I agonist compound of Claim 84, 85 or 86 in which n is 0.
89. (Reinstated-formerly Claim 67) The multimeric ApoA-I agonist compound of Claim 86 in which m is 0.
90. (New) The multimeric ApoA-I agonist compound of Claim 84, 85 or 86 in which each HH is independently an altered peptide or peptide analogue.
91. (New) The multimeric ApoA-I agonist compound of Claim 84, 85, or 86 in which each HH is independently a deleted peptide or peptide analogue.
92. (New) An ApoA-I agonist compound-lipid complex comprising a lipid and an ApoA-I agonist compound according to Claim 76, 84, 85 or 86.
93. (New) The ApoA-I agonist compound-lipid complex of Claim 92 in which the lipid is sphingomyelin.
94. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, excipient or diluent and an ApoA-I agonist compound according to Claim 76, 84, 85 or 86.

95. (New) A pharmaceutical composition comprising an ApoA-I agonist compound-lipid complex wherein the ApoA-I agonist compound-lipid complex is comprised of an ApoA-I agonist compound according to Claim 76, 84, 85 or 86, a lipid and a pharmaceutically acceptable carrier, excipient or diluent.
96. (Reinstated-formerly Claim 72) The pharmaceutical composition of Claim 95 in which the lipid is sphingomyelin.
97. (Reinstated-formerly Claim 73) The pharmaceutical composition of Claim 96 which is a lyophilized powder.
98. (New) A method of treating a subject suffering from a disorder associated with dyslipidemia, said method comprising the step of administering to the subject an effective amount of an ApoA-I agonist compound according to Claim 76, 84, 85 or 86.
99. (New) A method of treating a subject suffering from septic shock, said method comprising the step of administering to the subject an effective amount of an ApoA-I agonist compound according to Claim 76, 84, 85 or 86.
100. (Reinstated-formerly Claim 74) The method of Claim 98 in which said subject is a human.
101. (New) The method of Claim 99 in which said subject is a human.
102. (Reinstated-formerly Claim 75) The method of Claim 98 in which about 0.5 mg/kg to about 100 mg/kg ApoA-I agonist compound is administered to said subject.
103. (New) The method of Claim 99 in which about 0.5 mg/kg to about 100 mg/kg ApoA-I agonist compound is administered to said subject